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Business Rules System

ABSTRACT

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A business rules system that creates a dynamic solution set between objects that have never been associated with one another prior to that particular instance of evaluation. A rule engine evaluates the associated objects and is programmed to evaluate a complex situation, come up with a solution and, as a result, not require the intervention of a human being. The rule engine enables the user to customize the behavior of business objects (*e.g.*, access control, order management, catalogs, and membership) to meet sophisticated business requirements. The invention provides a graphical user interface that allows a user to rapidly set up and maintain Business Rules in real time - with no source code recompilation needed. Domain tables are used to define the overall set of possible values for a given attribute of an object. Each rule may have one to many classes of interacting objects. A voter is a member or business object such as a product, price list, or ship-to location that provides input to be evaluated by the rule. Each instance of a voter may have a data value (vote) for a specific rule and has a hierarchical inheritance. Rule resolution strategies are used by the invention to resolve any conflicts between specific preferences of voters and to determine the correct answer to be used in an application program. The sequence of business objects and the order of the values included in each object determine the values of the results. The rule resolution logic returns only one answer for a question referencing a set of business objects.